



ABSTRACT OF THE DISCLOSURE

An interferential position measuring arrangement including a light source, which emits a beam of rays and an optical element, which converts the beam of rays emitted by the light source into an incoming beam of rays. A scale grating which splits the incoming beam of rays into a first partial beam of rays and a second partial beam of rays. A first scanning grating that causes splitting of the first partial beam of rays and a second scanning grating that causes splitting of the second partial beam of rays, wherein a periodically modulated interferential fringe pattern with a definite spatial interferential fringe pattern period results in a detection plane. A detection arrangement which causes splitting of light entering through the detection arrangement into at least three different spatial directions and optoelectronic detector elements arranged in the at least three spatial directions for detecting phase-shifted scanning signal.